Competency 2.20 EH Residents shall demonstrate a working level knowledge of the requirements for the emergency management system in the following Department of Energy (DOE) Orders:

- DOE Order 5500.1B, Emergency Management System
- DOE Order 5500.2B, Emergency Notification, Reporting Requirements
- DOE Order 5500.3A, Reactor and Non-Reactor Nuclear Facilities Emergency Management Planning, Preparedness and Response Program for DOE Operations

1. Supporting Knowledge and Skills

- a. Describe the key elements of Emergency Preparedness including planning, operations, principles, and methods.
- b. Explain the EH Residents' roles and responsibilities in emergency management and response to unplanned events.
- c. Explain the difference between the Occurrence Reporting and Processing System notification requirements and Emergency Management Systems event classification and notification requirements.
- d. Participate in and critique a site emergency exercise.

2. Self-Study Activities (corresponding to the intent of the above competency)

Below are two web sites containing many of the references you may need.

Web Sites		
Organization	Site Location	Notes
Department of Energy	http://wastenot.inel.gov/cted/stdguido.html	DOE Standards, Guides, and Orders
U.S. House of Representatives	http://law.house.gov/cfr.htm	Searchable Code of Federal Regulations

Read DOE Order 5500.1B, Emergency Management System.

Read DOE Order 5500.2B, *Emergency Categories, Classes, and Notification and Reporting Requirements.*

Read DOE Order 5500.3A, Planning and Preparedness for Operational Emergencies.

Scan DOE Order 5000.3A, Occurrence Reporting and Processing of Operational Information.

- EXERCISE 2.20-A Identify the DOE Order that assigns responsibilities and authorities for the Department's EMS.
- EXERCISE 2.20-B Identify the role of the field element in an operational emergency.
- EXERCISE 2.20-C Describe the organization and function of the Emergency management team (EMT) at the Headquarters (HQ) level.
- EXERCISE 2.20-D Define the term "operational emergency."
- EXERCISE 2.20-E Describe the membership and the function of the Emergency Management Advisory Committee (EMAC).
- EXERCISE 2.20-F The requirement for establishment of emergency operations centers is found in which DOE Order?
- EXERCISE 2.20-G Explain the differences and relationship between "occurrence reporting" and "notification" as contained in DOE Order 5000.3B, Occurrence Reporting and Processing of Operations Information, and DOE Order 5500.2B, Emergency Categories, Classes, and Notification and Reporting Requirements.

3. Summary

It is the purpose of DOE Orders to establish a framework for the Department's EMS.

DOE Order 5500.1B establishes the overall policy and requirements of the EMS. The Order states that the Under Secretary is the senior official for the EMS and convenes the HQ EMT. The HQ EMT is formed to manage response actions during emergencies involving DOE facilities or requiring DOE assistance. The EMAC is also established by this Order and supports the Director of Emergency Operations (DEO) in the development of specific policy and technical recommendations. Specific responsibilities are spelled out in this Order for Facility Managers, heads of field elements, and HQ Program Secretarial Officers (Program Senior Officials [PSOs]).

DOE Order 5500.2B establishes standard terminology for operational and energy emergencies. Operational emergencies are further classified as an Alert, a Site Area Emergency, or General Emergency according to the severity of the impact of the event. This Order also establishes a reporting requirement for emergency events.

DOE Order 5500.3A establishes the hazards assessment as the technical basis upon which all emergency management programs are developed. The Order states the requirements for planning and preparedness for operational emergencies and describes the 13 elements of an emergency management program.

4. Exercise Solutions

EXERCISE 2.20-A Identify the DOE Order that assigns responsibilities and authorities for the Department's EMS.

ANSWER 2.20-A DOE Order 5500.1B establishes the Department's EMS.

EXERCISE 2.20-B Identify the role of the field element in an operational emergency.

ANSWER 2.20-B

During an operational emergency, the cognizant field element is responsible for the following:

- 1. Ensuring prompt initial notification to state, tribal, and local governments and others, as appropriate
- 2. Ensuring proper response by facility managers to any emergency within their facilities
- 3. Providing additional technical assistance and support
- 4. Monitoring the facility response activities and recommending additional actions, as necessary
- 5. Predesignating an On-Scene Coordinator for Federal responses under the National Contingency Plan (NCP)
- 6. Ensuring emergency response actions are coordinated with the cognizant local, state, tribal, and Federal regional organizations
- Coordinating additional DOE and other Federal agency resources, as required
- 8. Overseeing the local investigation and closeout of the occurrence, in accordance with the HQ Program Manager

EXERCISE 2.20-C Describe the organization and function of the EMT at the HQ level.

ANSWER 2.20-C

The HQ EMT consists of an executive team and a technical operations cadre. The executive team provides strategic direction to the response and evaluates the broad impacts of the emergency on the DOE complex. The executive team is normally chaired by the Under Secretary, with the cognizant PSO serving as the Deputy Chair.

The technical operations cadre, which consists of several designated PSOs for nuclear and nonnuclear programs, provides oversight to the field element; coordinates with other Federal agencies; and provides information to the press, Congress, and other Federal agencies.

EXERCISE 2.20-D Define the term "operational emergency."

ANSWER 2.20-D

Operational emergencies are significant accidents, incidents, events, or natural phenomena that seriously degrade the safety or security of DOE facilities. Operational emergencies apply to DOE reactors and other DOE facilities (nuclear and nonnuclear) involved with hazardous materials; DOE-controlled nuclear weapons, components, or test devices; DOE safeguards and security events; and transportation accidents involving hazardous materials.

EXERCISE 2.20-E Describe the membership and the function of the EMAC.

ANSWER 2.20-E

The EMAC, chaired by the DEO, consists of individuals with emergency preparedness responsibilities, appointed by and representing the cognizant HQ PSOs and heads of field elements.

The functions of the EMAC are to assist the DEO in the identification of problem areas related to the DOE EMS, provide recommended solutions to such problems, and assist with the development of policy and technical recommendations to enhance and implement the DOE emergency preparedness program.

EXERCISE 2.20-F The requirement for establishment of EOCs is found in which DOE Order?

ANSWER 2.20-F The requirement for the establishment of EOCs is found in DOE Order 5500.2B.

EXERCISE 2.20-G Explain the differences and relationship between "occurrence reporting" and "notification" as contained in DOE Order 5000.3A, Occurrence Reporting and Processing of Operations Information, and DOE Order 5500.2B, Emergency Categories, Classes, and Notification and Reporting Requirements.

ANSWER 2.20-G The purpose of occurrence reporting under DOE Order 5000.3 is to document events and provide for appropriate corrective action. The purpose of reporting under 5500.2B is to ensure that appropriate response actions can be undertaken and that appropriate resources are available to mitigate the emergency.

DOE Order 5000.3A provides requirements for reporting event occurrences. Reportable events are categorized as Off-Normal Occurrences, Unusual Occurrences, and Emergencies. Once an event has been categorized under 5000.3A, oral notification to HQ and off-site agencies must be made within 2 hours of categorization for an Unusual Occurrence and within 15 minutes for an Emergency; written notification is required within 80 hours of the categorization.

If an event is categorized as an Emergency, it is further classified as an Alert, Site Area, or General Emergency by 5500.2B, and oral notification is required within 15 minutes of declaration of the emergency.